THE FIRST HAND OVER DATA
PO EQUIPMENT

SITE NAME : **Imam Bonjol**
SITE ID : **BLS094**
AREA : **Pekanbaru**

Hariff	**PT. Hariff DAYA TUNGGAL ENGINEERING** **BERITA ACARA PEMERIKSAAN LAPANGAN** **Rumah Beton** **RECTIFIER PT. TELKOMSEL**

Lokasi	**: Imam Bonjol**		
Area	**: Pekanbaru**		
Site ID	**: BLS094**		

Pada hari ini tanggal bulan
tahun Dua Ribu Dua Belas, sesuai dengan kontrak No. tanggal
Telah dilaksanakan Pemeriksaan Lapangan pekerjaan pemasangan perangkat dengan hasil :

BAIK dan LAYAK dioperasikan
Hasil Pengujian & Pemeriksaan terlampir

Demikian Berita Acara Pemeriksaan Lapangan ini dibuat dengan itikad baik untuk di pergunakan sebagaimana mestinya

Pelaksana :
PT. HARIFF DTE

Mengetahui / Menyetujui :
PT. TELKOMSEL

Deam RM Simamora

Proyek : Telkomsel No. Proyek :	Lokasi : Imam Bonjol Site ID : BLS 094	Area : Pekanbaru

RECTIFIER SYSTEM

☑ = OK

☒ = NOK

Rectifier Series : HARIFF POWER SYSTEM
Rectifier Type : HOPS 1 APR48 3G
Rectifier Capacity : 3 x 31 A / 48 3G
Voltage Input : 220 V (Line to neutral)

I. VISUAL CHECK

I.1. SYSTEM

NO.	DESKRIPSI	HASIL	KONDISI	KETERANGAN
1	Tipe Rack Rectifier :	~~Indoor~~/ Outdoor	OK / ~~NOK~~	
	Ukuran/dimensi Rack (p x l x t - mm)		-	
	Kondisi Fisik Rack Rectifier		OK / ~~NOK~~	
	Lampu untuk Enclosure Outdoor		OK / ~~NOK~~	
	Operasi Fan enclosure Outdoor		OK / ~~NOK~~	
2	Name Plate :		-	
	Telkomsel Name Plate	-	OK / ~~NOK~~	
	Vendor Name Plate	-	OK / ~~NOK~~	
3	MCB incoming AC (di Rectifier) :		-	
	Ukuran/tipe kabel AC dari ACPDB ke Rectifier		OK / ~~NOK~~	
	MBC Merk	ABB	OK / ~~NOK~~	
	MCB Type	SH 201 L	OK / ~~NOK~~	
	MCB Kapasitas (Amp)	40 A	OK / ~~NOK~~	
4	MCB untuk Rectifier Module :	-	-	
	MBC Merk	ABB	OK / ~~NOK~~	
	MCB Type	SH 201 L	OK / ~~NOK~~	
	MCB Kapasitas (Amp)	16 A	OK / ~~NOK~~	
5	Battery Distribution :	-	-	
	MBC / NH-Fuse Merk	MCB/ABB	OK / ~~NOK~~	
	MCB / NH-Fuse Type	MCB S 201	OK / ~~NOK~~	
	MCB / NH-Fuse Kapasitas (Amp)	63 A	OK / ~~NOK~~	
	Jumlah MCB / NH-Fuse	10	OK / ~~NOK~~	
6	MCB untuk distribusi Beban :	-	-	
	MBC Merk	ABB	OK / ~~NOK~~	
	MCB Type	S 281 / SH 201 L	OK / ~~NOK~~	
	MCB Kap (Amp) x Jumlah.....[1]	63 A X 3	OK / ~~NOK~~	
	MCB Kap (Amp) x Jumlah .....[2]	125 A X 1	OK / ~~NOK~~	
	MCB Kap (Amp) x Jumlah .....[3]	6 A X 9	OK / ~~NOK~~	
7	Arrester incoming (di Rectifier) :	-	-	
	Arrester Merk :		OK / ~~NOK~~	
	Arrester Type :		OK / ~~NOK~~	
8	Subrack Rectifier :	-	-	
	Jumlah Subrack		OK / ~~NOK~~	
	S/N Subrack #1		OK / NOK	

	S/N Subrack #2		OK / NOK	
	S/N Subrack #3		OK / NOK	
9	Type Rack Battery (Extended) :	~~Indoor~~ / Outdoor	OK / NOK	
	Ukuran/dimensi Rack (p x l x t - mm)		-	
	Kapasitas per Rack (bank & block)		-	
10	Battery Security system :	-	-	
	Kerangkeng Battery	Available / Not Available	OK / NOK	
	Limit switch alarm	Available / Not Available	OK / NOK	
11	DDF Alarm di Rectifier :	-	-	
	Koneksi kabel Alarm dr Rectifier ke DDF	Available / Not Available	OK / NOK	
	Label port Alarm di DDF	Available / Not Available	OK / NOK	

I.2. MONITOR & CONTROL CARD

NO.	DESKRIPSI	HASIL	KONDISI	KETERANGAN
1	Type Monitor & Control Card/Modul	SC 200	OK / ~~NOK~~	
2	Serial number Monitor & Control Card/Modul	244910112	OK / ~~NOK~~	

I.3. BATTERY

NO.	DESKRIPSI	HASIL	KONDISI	KETERANGAN
1	Merk Battery	MAX LIFE	OK / ~~NOK~~	
	Type Battery	FGB 12-100	OK / ~~NOK~~	
2	Total Bank Battery	3 BANK	OK / ~~NOK~~	
3	Kondisi Fisik Battery		OK / ~~NOK~~	
4	Label Serial Number Battery		OK / ~~NOK~~	
5	Label Battery Bank		OK / ~~NOK~~	
6	Serial Number Battery			
	Battery 1 ; S/N :N1210013033000213	Bank # :	Battery 25 ; S/N :_____	Bank # :
	Battery 2 ; S/N : N1210013033006906	Bank # :	Battery 26 ; S/N :_____	Bank # :
	Battery 3 ; S/N : N1210013033006906	Bank # :	Battery 27 ; S/N :_____	Bank # :
	Battery 4 ; S/N : N1210013033006913	Bank # :	Battery 28 ; S/N :_____	Bank # :
	Battery 5 ; S/N : N1210013033000114	Bank # :	Battery 29 ; S/N :_____	Bank # :
	Battery 6 ; S/N : N1210013033000113	Bank # :	Battery 30 ; S/N :_____	Bank # :
	Battery 7 ; S/N : N1210013040201104	Bank # :	Battery 31 ; S/N :_____	Bank # :
	Battery 8 ; S/N : N1210013033004213	Bank # :	Battery 32 ; S/N :_____	Bank # :
	Battery 9 ; S/N : N1210013033006404	Bank # :	Battery 33 ; S/N :_____	Bank # :
	Battery10; S/N : N1210013033000211	Bank # :	Battery 34 ; S/N :_____	Bank # :
	Battery 11 ; S/N :N1210013033002223	Bank # :	Battery 35 ; S/N :_____	Bank # :
	Battery 12; S/N : N1210013033002230	Bank # :	Battery 36 ; S/N :_____	Bank # :
	Battery 13; S/N :	Bank # :	Battery 37 ; S/N :_____	Bank # :
	Battery 14 ; S/N :	Bank # :	Battery 38 ; S/N :_____	Bank # :
	Battery 15 ; S/N :	Bank # :	Battery 39 ; S/N :_____	Bank # :
	Battery 16 ; S/N :	Bank # :	Battery 40 ; S/N :_____	Bank # :
	Battery 17 ; S/N :	Bank # :	Battery 41 ; S/N :_____	Bank # :
	Battery 18 ; S/N :	Bank # :	Battery 42 ; S/N :_____	Bank # :
	Battery 19 ; S/N :	Bank # :	Battery 43 ; S/N :_____	Bank # :

	Battery 20 ; S/N :	Bank # :	Battery 44 ; S/N :	Bank # :
	Battery 21 ; S/N :	Bank # :	Battery 45 ; S/N :	Bank # :
	Battery 22 ; S/N :	Bank # :	Battery 46 ; S/N :	Bank # :
	Battery 23 ; S/N :	Bank # :	Battery 47 ; S/N :	Bank # :
	Battery 24 ; S/N :	Bank # :	Battery 48 ; S/N :	Bank # :

I.4. MODULE RECTIFIER

NO.	DESKRIPSI	HASIL	KONDISI	KETERANGAN
1	Merk Module Rectifier	EATON	OK / ~~NOK~~	
	Type Module Rectifier	APR48 3G	OK / ~~NOK~~	
	Kapasitas Modul (Watt @ 48 Vdc)		OK / ~~NOK~~	
2	Serial Number module rectifier			
	Rectifier 1 ; S/N :	Phase :	Rectifier 13 ; S/N :	Phase :
	Rectifier 2 ; S/N : 244599335	Phase :	Rectifier 14 ; S/N :	Phase :
	Rectifier 3 ; S/N :	Phase :	Rectifier 15 ; S/N :	Phase :
	Rectifier 4 ; S/N :	Phase :	Rectifier 16 ; S/N :	Phase :
	Rectifier 5 ; S/N : 244599374	Phase :	Rectifier 17 ; S/N :	Phase :
	Rectifier 6 ; S/N :	Phase :	Rectifier 18 ; S/N :	Phase :
	Rectifier 7 ; S/N :	Phase :	Rectifier 19 ; S/N :	Phase :
	Rectifier 8 ; S/N : 245090315	Phase :	Rectifier 20 ; S/N :	Phase :
	Rectifier 9 ; S/N :	Phase :	Rectifier 21 ; S/N :	Phase :
	Rectifier 10 ; S/N :	Phase :	Rectifier 22 ; S/N :	Phase :
	Rectifier 11 ; S/N :	Phase :	Rectifier 23 ; S/N :	Phase :
	Rectifier 12 ; S/N :	Phase :	Rectifier 24 ; S/N :	Phase :

I.5. INSTALLATION

NO.	DESKRIPSI	HASIL	KONDISI	KETERANGAN
1	Rectifier	-	-	
	Kerapihan instalasi kabel dari ACPDB ke Rectifier	-	OK / ~~NOK~~	
	Kekencangan koneksi kabel di ACPDB dan Rectifier	-	OK / ~~NOK~~	
	Instalasi Blank Panel Module	-	OK / ~~NOK~~	
2	Battery	-	-	
	Kerapihan instalasi posisi Battery	-	OK / ~~NOK~~	
	Kerapihan instalasi kebel Battery Bank	-	OK / ~~NOK~~	
	Instalasi Sensor Battery Temperature	-	OK / ~~NOK~~	
3	ACPDB	-	-	
	Kapasitas MCB incoming Rectifier di ACPDB	-	OK / ~~NOK~~	
	Kondisi Arrester di ACPDB	-	OK / ~~NOK~~	
4	Grounding	-	-	
	Ukuran kabel Grounding (mm)		OK / ~~NOK~~	
	Kerapihan instalasi kabel grounding dari Rectifier	-	OK / ~~NOK~~	

II. FUNCTIONAL CHECK

II.1. MONITOR & CONTROL CARD/MODULE

NO.	DESKRIPSI	REFERENSI	HASIL	KETERANGAN
1	Pembacaan Tegangan dan Arus DC pada Display Control Module	-	-	
	Arus Rectifier	-	6 Adc	
	Arus Load/beban	-	3 Adc	
	Arus charging Battery	-	3 Adc	
	Tegangan Bus	-	57.42 Vdc	
	Tegangan Battery	-	57.42 Vdc	
2	Pembacaan Tegangan dan Arus DC menggunakan Multi-meter	-	-	
	Arus Load/beban	-	Adc	
	Arus charging Battery	-	Adc	
	Tegangan Bus	-	Vdc	
	Tegangan Battery	-	Vdc	
3	Pembacaan Tegangan AC pd Display Control Module (V phase - Netral)	-	Vac	
4	Pembacaan Tegangan AC menggunakan Multi-meter	-	-	
	V phase R - Netral	-	229.9 Vac	
	V phase S - Netral	-	228.4 Vac	
	V phase T - Netral	-	230.8 Vac	
	V Netral - Ground	-	1.1 Vac	
5	LVD Setting	-	-	
	LVD1 Disconnect (LVLD)	45,0 Vdc	46.00 Vdc	
	LVD1 Reconnect (LVLD)	48,0 Vdc	48.00 Vdc	
	LVD2 Disconnect (LVBD)	43,2 Vdc	43.20 Vdc	
	LVD2 Reconnect (LVBD)	51,0 Vdc	48.00 Vdc	
6	Alarm Setting	-	-	
	High Float	V float + 0,5 Vdc	56,00 Vdc	
	Low Float	Vfloat - 2,0 Vdc	52.60 Vdc	
	Low Load / Low Battery	46 Vdc	48 Vdc	
	AC Fail Alarm	165 Vac	..... Vac	
	Partial AC Fail (hilang 1 phase)	Enable	OK / ~~NOK~~	
	Battery Fuse Fail	Enable	OK / ~~NOK~~	
	Rectifier Fail Alarm	Enable	OK / ~~NOK~~	
	Battery high Temperature	35 C	40 C	
7	Mapping & Simulasi Alarm Relay	-	-	
a	Relay #1	AC Fail / Partial AC Fail	-	
	Set alarm Relay #1 ke 'AC Fail' dan 'Partial AC Fail', setting contact 'NO'	-	OK / NOK	
	Test output Relay #1 di DDF menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	
	Simulasi ubah setting contact Relay #1 dari 'NO' ke 'NC', kemudian ukur di DDF menggunakan Multi-meter	Short circuit (0 ohm)	OK / NOK	
	Set contact Relay #1 kembali ke 'NO', kemudian ukur di DDF Relay #1 menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	

b	Relay #2	Rectifier Fail	-	
	Set alarm Relay #2 ke 'Rectifier Fail', kemudian setting contact 'NO'	-	OK / NOK	
	Test output Relay #2 di DDF menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	
	Simulasi ubah setting contact Relay #2 dari 'NO' ke 'NC', kemudian ukur di DDF menggunakan Multi-meter	Short circuit (0 ohm)	OK / NOK	
	Set contact Relay #2 kembali ke 'NO', kemudian ukur di DDF Relay #2 menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	
c	Relay #3	Low Load/Low Battery	-	
	Set alarm Relay #3 ke 'Low Load' atau 'Low Battery', kemudian setting contact 'NO'	-	OK / NOK	
	Test output Relay #3 di DDF menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	
	Simulasi ubah setting contact Relay #3 dari 'NO' ke 'NC', kemudian ukur di DDF menggunakan Multi-meter	Short circuit (0 ohm)	OK / NOK	
	Set contact Relay #3 kembali ke 'NO', kemudian ukur di DDF Relay #3 menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	
d	Relay #4	Battery Temperature High	-	
	Set alarm Relay #4 ke 'Battery High Temperature', kemudian setting contact 'NO'	-	OK / NOK	
	Test output Relay #4 di DDF menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	
	Simulasi ubah setting contact Relay #4 dari 'NO' ke 'NC', kemudian ukur di DDF menggunakan Multi-meter	Short circuit (0 ohm)	OK / NOK	
	Set contact Relay #4 kembali ke 'NO', kemudian ukur di DDF Relay #4 menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	
e	Relay #5	Generator Start	OK / NOK	
	Set alarm Relay #5 ke 'Generator Start', kemudian setting contact 'NO'	-	OK / NOK	
	Test output Relay #5 di DDF menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	
	Simulasi ubah setting contact Relay #5 dari 'NO' ke 'NC', kemudian ukur di DDF menggunakan Multi-meter	Short circuit (0 ohm)	OK / NOK	
	Set contact Relay #5 kembali ke 'NO', kemudian ukur di DDF Relay #4 menggunakan Multi-meter	Open circuit (∞ ohm)	OK / NOK	

II.2. SETTING UNTUK APLIKASI RECTIFIER STAND BY (PLN AVAILABLE)

NO.	DESKRIPSI	REFERENSI	HASIL	KETERANGAN
1	Float Voltage	53,5 Vdc - 55,5 Vdc	55.20 Vdc	
2	Fast Charge	Enable	OK / ~~NOK~~	
	Fast Charge Voltage	56,0 Vdc - 58,0 Vdc	57.60 Vdc	
3	Equalize Charge	Enable	OK / ~~NOK~~	
	Equalize Voltage	56,0 Vdc - 58,0 Vdc	57.60Vdc	

	Equalize Interval	60 days	122 Days	
	Equalize duration	10 hrs	16 Hrs	
4	Battery Current Limit (BCL) Enable	Enable	OK / ~~NOK~~	
	Battery Current Limit (BCL)	10%	10 %	
5	Kapasitas Battery (Ah)	-	300 Ah	

II.3. CHARGE DISCHARGE (CDC) APPLICATION SET POINT

NO.	DESKRIPSI	REFERENSI	HASIL	KETERANGAN
1	General Information	-	-	
	Type Rectifier	-		
	Jumlah Modul Rectifier	-		
	Arus Load/Beban DC	-	.....Adc	
	Battery Type / Bank	-		
	Genset Brand / Capacity	-		
	Vendor ATS	-		
	AMF Module Brand	RGAM-41, EasyGen-1500, DeepSea-5220		
	COS Brand	ASCO, Kyoritsu		
2	Calculation	-	-	
	Estimate Discharge Period (Tdc)	-	.....Hrs	
	Estimate Charge Period (Tcc)	-	.....Hrs	
3	Control Card Setting	-	-	
	Float Voltage	56,4 Vdc	55.20 Vdc	
	Battery Capacity	-	300 Ah	
	Fast Charge Enable	Enable	OK / ~~NOK~~	
	Fast Charge Voltage	56,4 Vdc	57.60 Vdc	
	Start Cond. Voltage threshold	46,0 Vdc	.....Vdc	
	Start Cond. Ah threshold	30%	30 %	
	Stop Cond. Recharge precentage	110%	110 %	
	Stop Cond. Maximum Durations	6 hrs	.....Hrs	
	BCL Enable	Enable	OK / ~~NOK~~	
	BCL Precentage	10%	10 %	
4	Setting Panel ATS	-	-	
	Back-up Time utk Genset Running	Tdc + 2 hrs	.....Hrs	
	Back-up Time utk Genset Stop	Tdd + 2 hrs	.....Hrs	
	Monthly timer Periods	15 hrs	.....Hrs	
	Monthly timer Durations	30 days	.....Days	
5	Simulasi System CDC	-	-	
A	Simulasi Genset Run dari Rectifier	-	OK / NOK	
	Pastikan Panel pada posisi Auto CDC-MF	-	OK / NOK	
	Koneksi dari DDF Rectifier Alarm Relay #5 (Generator Start) disambungkan ke terminal 'Trigger Rectifier' di ATS	-	OK / NOK	
	Periksa kondisi sambungan kabel UTP tidak ada yg putus atau pun short circuit	-	OK / NOK	
	Trigger alarm 'Generator Start' dengan mengubah setting contact ke 'NC'	Genset Running	OK / NOK	

	Yakinkan posisi ATS pindah ke Genset/ Emergency (setelah beberapa menit warm up)	ATS pindah ke posisi Genset/Emergency	OK / NOK	
B	Simulasi Genset Stop dari Rectifier	-	-	
	Alarm 'Generator Start' diubah setting contact kembali menjadi 'NO'	-	OK / NOK	
	Yakinkan posisi ATS pindah ke PLN/ Normal	ATS pindah ke posisi PLN/Normal	OK / NOK	
	Genset shut down setelah cool down beberapa menit	Genset Stop	OK / NOK	
C	Simulasi Timer Back-up Genset saat OFF (pada panel ATS)	-	-	
	Pastikan Genset sedang OFF dengan perintah dari Rectifier (sesuai point a)	-	OK / NOK	
	Trigger Timer Back-up Genset OFF pada Timer #3 (T3 pd panel ATS diputar menuju ke 0)	Genset Running	OK / NOK	
	Setelah Genset Running kembali kan T3 ke setting waktu awal	-	OK / NOK	
	Yakinkan posisi ATS pindah ke Genset/ Emergency (setelah beberapa menit warm up)	ATS pindah ke posisi Genset/Emergency	OK / NOK	
	Yakinkan Alarm Timer Backup Aktif pada panel ATS	Alarm Timer backup Aktif	OK / NOK	
	Test trigger Genset Run dari Rectifier diubah-ubah	Tidak berpengaruh, Genset tetap RUN	OK / NOK	
D	Simulasi Timer Back-up Genset saat RUN/ON (pada panel ATS)	-	-	
	Timer Back-up Genset RUN/ON pada Timer #4 (T4 pd panel ATS diputar menuju ke 0)	ATS pindah ke posisi PLN/Normal	OK / NOK	
	Setelah posisi ATS pindah ke PLN/ Normal, kembalikan T4 ke setting waktu awal	-	OK / NOK	
	Yakinkan genset shut down (setelah beberapa menit cool down)	Genset Stop	OK / NOK	
	Yakinkan Alarm Timer Back-up pada ATS masih Aktif	Alarm Timer backup Aktif	OK / NOK	
	Test trigger Genset Run dari Rectifier diubah-ubah, seharusnya tidak berpengaruh	Tidak berpengaruh, Genset tetap STOP	OK / NOK	
E	Simulasi Monthly Timer Aktif (pada panel ATS)	-	-	
	Turunkan setting waktu Timer #1 (T1 pd panel ATS) menuju ke 0	Genset Running	OK / NOK	
	Setelah Genset Running kembali kan T1 ke setting waktu awal	-	OK / NOK	
	Yakinkan posisi ATS pindah ke Genset/ Emergency (setelah beberapa menit warm up)	ATS pindah ke posisi Genset/Emergency	OK / NOK	
	Periksa Timer T3 dan T4, seharusnya dalam kondisi OFF	T3 & T4 OFF	OK / NOK	
	Simulasi trigger dari Rectifier dan Timer back-up, seharusnya tidak berpengaruh	Tidak berpengaruh, Genset tetap RUN	OK / NOK	
F	Simulasi Monthly Timer Finish (pada panel ATS)	-	-	
	Turunkan setting waktu Timer #2 (T2 pd panel ATS) menuju ke 0	ATS pindah ke posisi PLN/Normal	OK / NOK	
	Setelah posisi ATS pindah ke PLN/	-	OK / NOK	

	Normal, kembalikan T2 ke setting waktu awal			
	Yakinkan genset shut down (setelah beberapa menit cool down)	Genset Stop	OK / NOK	
	Yakinkan Alarm Timer Backup sudah hilang pada panel ATS	Alarm Timer backup OFF	OK / NOK	

III. EXPANSION CHECK & CALCULATION

Site Name :			**Simoma (Sample)**			
Rect #1	Load (Adc):	a.	exist BB+BSC			
		b.	Plan UG BB			
		c.	Exhaust Fan			
	Battery Type					
	Battery Bank					
	Total Battery Capacity (Ah)					
	Estimate Backup time (Table)					
	Batt Current Limit (%)					
	Config Modul :	R =				
		S =				
		T =				
	Remarks Rectifier		**Exist** rect (APR-48), Modul, **Remove** Mod (Mod spare, Mod to site XXX)			
	Location		Shelter #1			
	Remarks Battery		**Exist** Batt A602/960 x 1 bank			
Rect #2	Load (Adc):	a.	BTS 2 GSM			
		b.	-			
	Battery Type					
	Battery Bank					
	Total Battery Capacity (Ah)					
	Estimate Backup time (Table)					
	Batt Current Limit (%)					
	Config Modul :	R =				
		S =				
		T =				
	Remarks Rectifier		**Exist** rect (APR-48), Mod			
	Location		Shelter #1			
	Remarks Battery		**Exist** Batt S12/130 x bank			
Rect #3	Load (Adc):	a.	N/A			
		b.	N/A			
	Battery Type		N/A			
	Battery Bank		N/A			
	Total Battery Capacity (Ah)		N/A			
	Estimate Backup time (Table)		N/A			
	Batt Current Limit (%)		N/A			
	Config Modul :	R =	N/A			

		S =	N/A	
		T =	N/A	
	Remarks Rectifier		N/A	
	Location		N/A	
	Remarks Battery		N/A	
Rect #4	Load (Adc):	a.	N/A	
		b.	N/A	
	Battery Type		N/A	
	Battery Bank		N/A	
	Total Battery Capacity (Ah)		N/A	
	Estimate Backup time (Table)		N/A	
	Batt Current Limit (%)		N/A	
	Config Modul :	R =	N/A	
		S =	N/A	
		T =	N/A	
	Remarks Rectifier		N/A	
	Location		N/A	
	Remarks Battery		N/A	
Air Conditioner	Capacity (PK)			
	Config (Aac) :	R =		
		S =		
		T =		
	Remarks		Propose downgrade to 1.5 PK, Mode Run changed to 1 by 1 only, and on single phase per Air Cond	
Lighting & Receptacle	Capacity (Aac)			
	Config :	R =		
		S =		
		T =	-	
	Remarks			
Maximum Site Load	Load Config (Aac @ 170 Vac):	R =		
		S =		
		T =		
	Max Load (kVA @ 170 Vac)			
	Minimum Genset Required (kVA)			
	PLN Available on Site (kVA)			
	Genset Available on Site (kVA)			
	PLN Colocated Availbility		Able Colocated	

IV. NOTE & APPROVAL

Tanggal Test : 11 Juli 2013
Pelaksana :

PT. Hariff **DAYA TUNGGAL ENGINEERING**
1.

(Indra)

2.

(_____)

Mengetahui / Menyetujui :

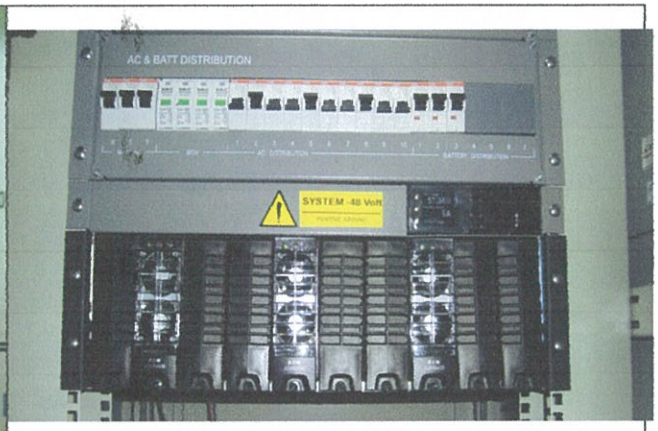
PT. Telkomsel
1.

( )

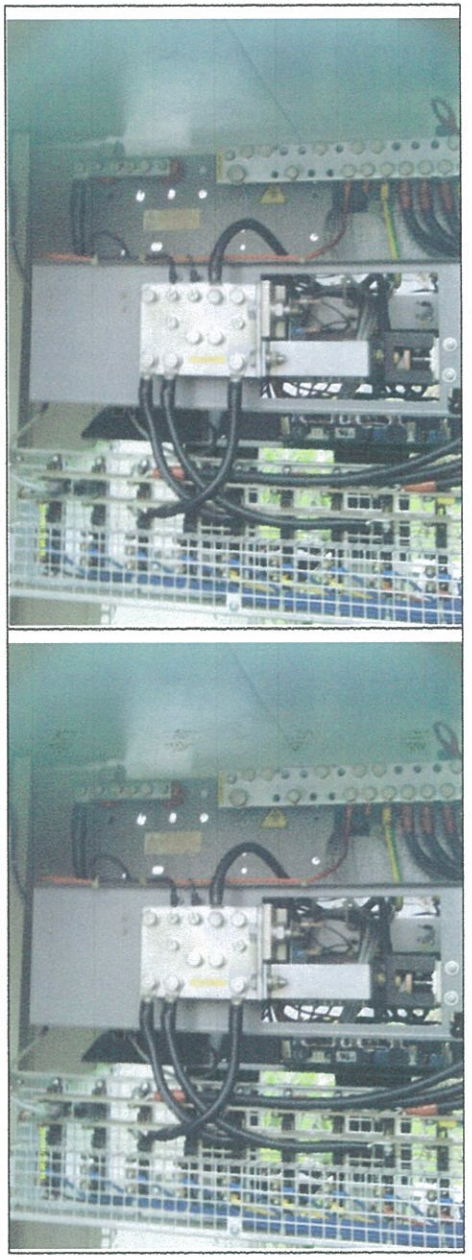
2.

(_____)

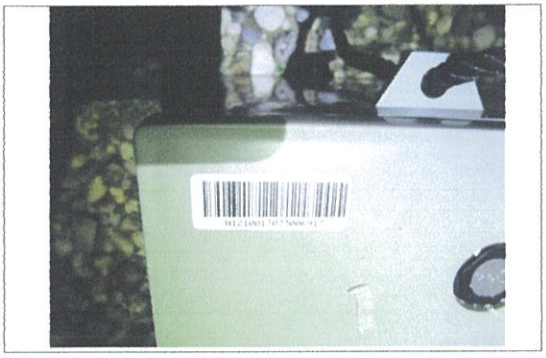
TELKOMSEL
SITE ID / SITE NAME : BLS 094 / IMAM BONJOL
TOWER TYPE / HEIGHT : SST 42 METER
BEBAN IDENTIK MAKSIMUM : -
BEBAN TERPASANG : - 6 BH ANTENA SECTOR 262 MM X 2580
- 6 BH ANTENA SHIELDED Ø 60 CM
FABRICATOR TOWER : PT. ARMINDO
VENDOR : PT. ERICSSON INDONESIA
SERVICE PROVIDER : PT. ERA BANGUN JAYA
TAHUN PEMASANGAN : 2009
PT. ERA BANGUN JAYA
ERICSSO

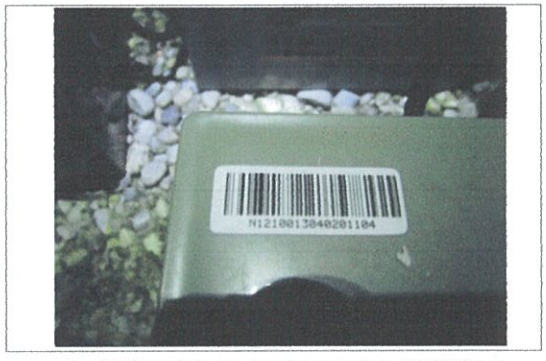

AC & BATT DISTRIBUTION
SYSTEM -48 Volt

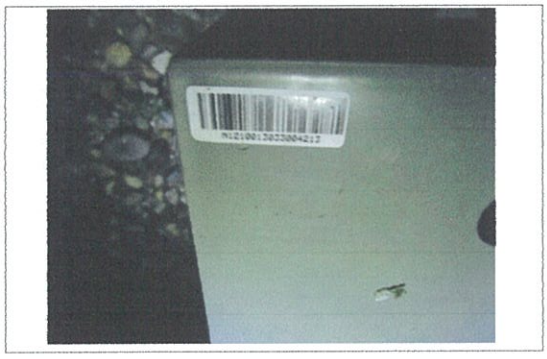
IMAM
BONJOL

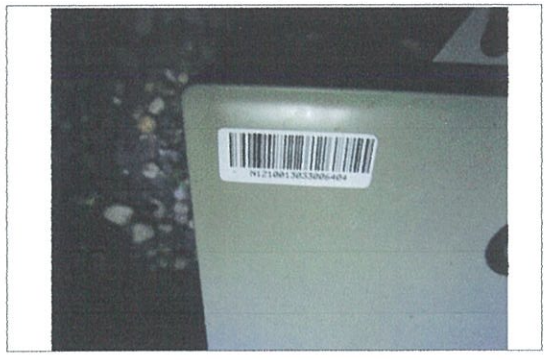


IMAM BONJOL
2013/04/20 14:25
IMAM BONJOL
2013/04/20 13:48





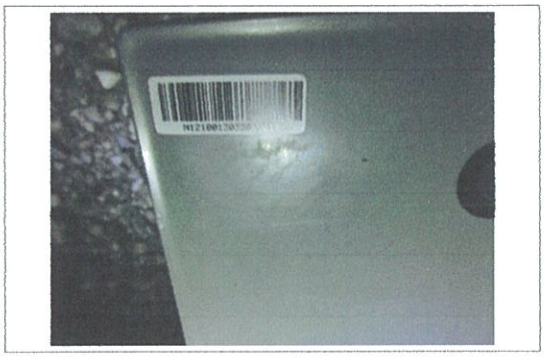




Serial Number Battry

Designed by	Checked by	Approved by	Site Name	Side ID	Area	Date
			IMAM BONJOL	BLS 094	PEKANBARU	11/07/2013

Owner	Title		
Hariff	**Picture Of Rectifier**		
	Drawing Number	Edition	Sheet 4/5



Serial Number Battry

Designed by	Checked by	Approved by	Site Name	Side ID	Area	Date
			IMAM BONJOL	BLS 094	PEKANBARU	11/07/2013

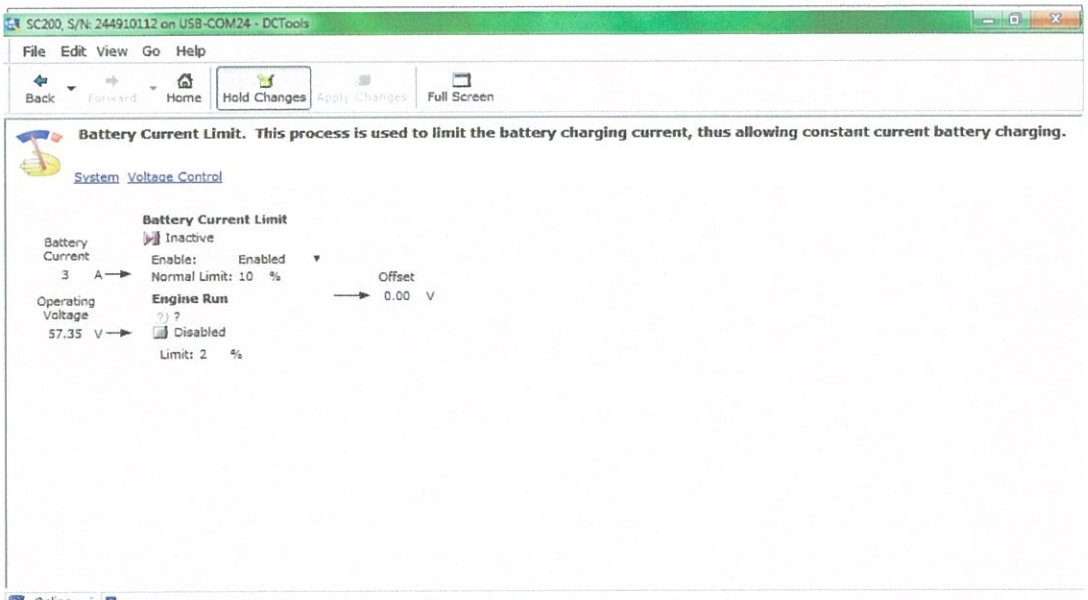
Owner

Hariff

Title

Picture Of Rectifier

Drawing Number	Edition	Sheet
		5/5



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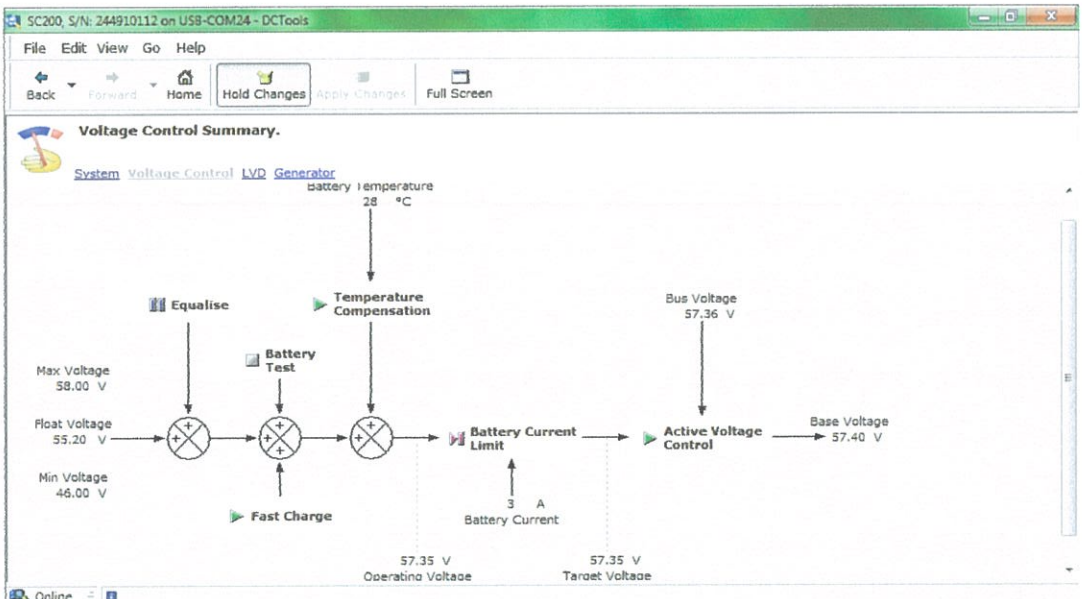
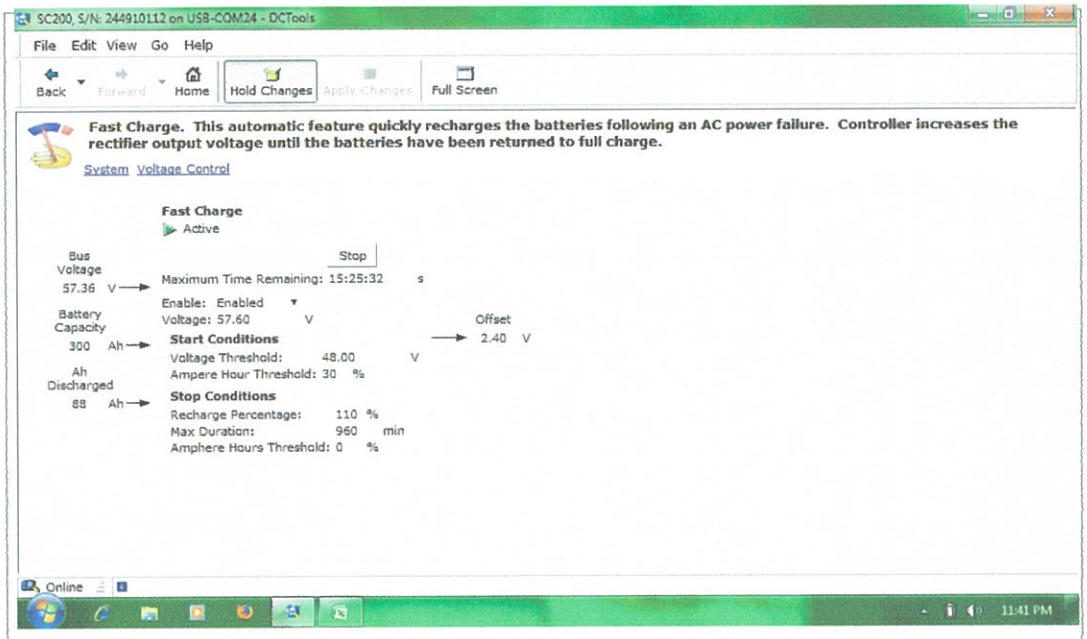


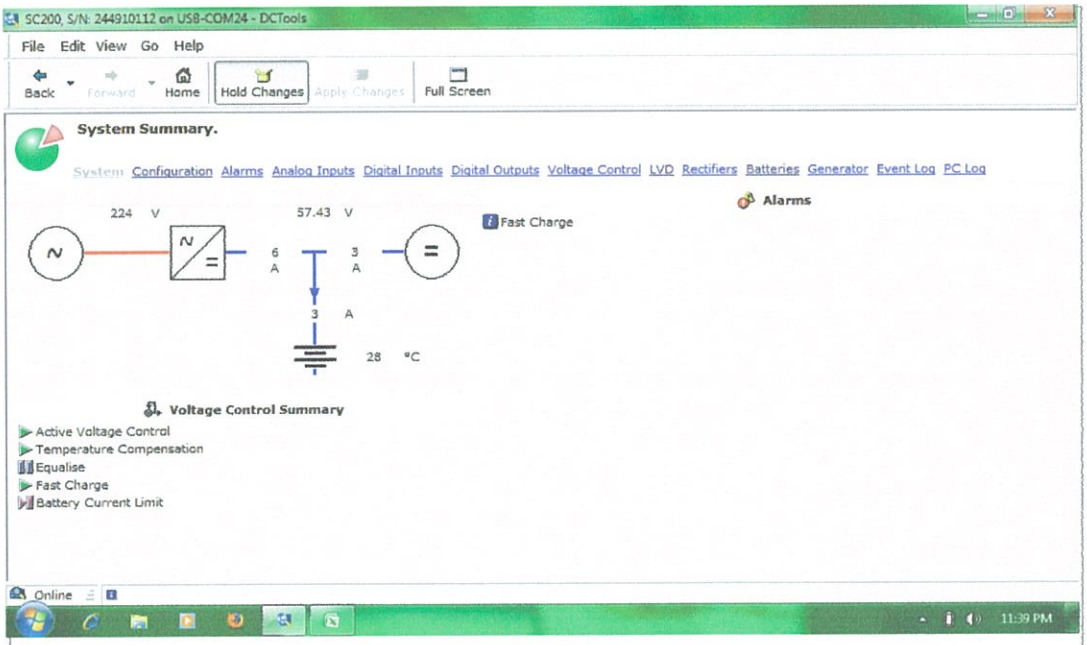
VOLTAGE CONTROL SUMMARY

Designed by	Checked by	Approved by	Site Name	Side ID	Area	Date
			MAM BONJOL	BLS 094	PEKANBARU	09/04/2013

Owner	Title		
Hariff	**Picture Capture Of Rectifier**		
	Drawing Number	Edition	Sheet 1/4



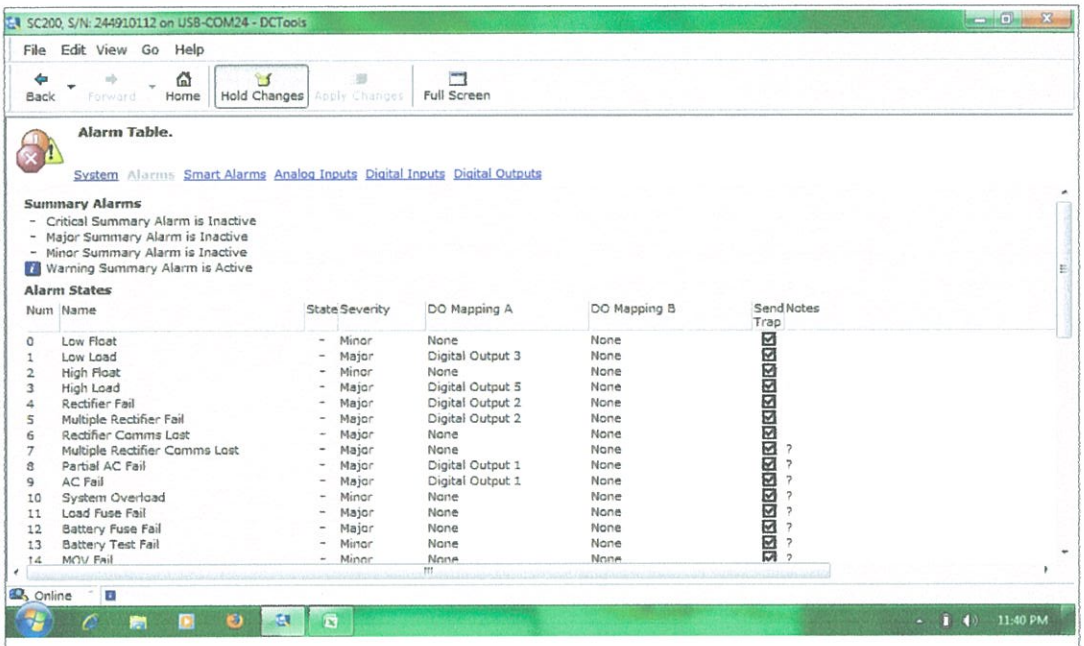
FAST CHARGE



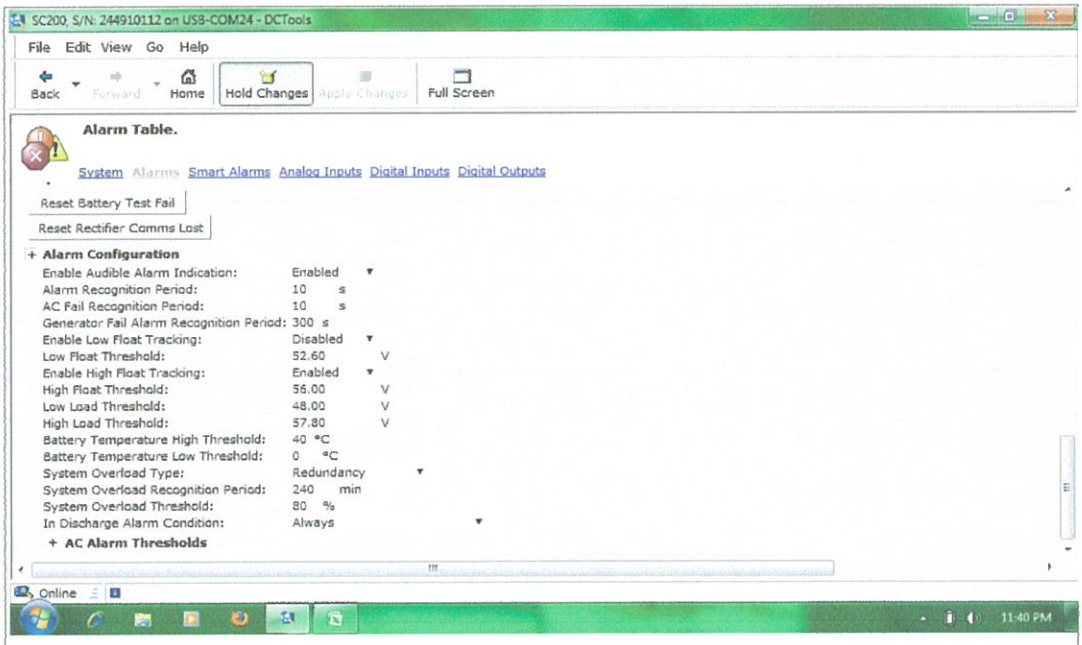
SYSTEM SUMMARY

Designed by	Checked by	Approved by	Site Name	Side ID	Area	Date
			IMAM BONJOL	BLS 094	PEKANBARU	09/04/2013

Owner	Title		
Hariff	**Picture Capture Of Rectifier**		
	Drawing Number	Edition	Sheet 2/4



ALARM 1



ALARM 2

Designed by	Checked by	Approved by	Site Name	Side ID	Area	Date
			MAM BONJOL	BLS 094	PEKANBARU	09/04/2013

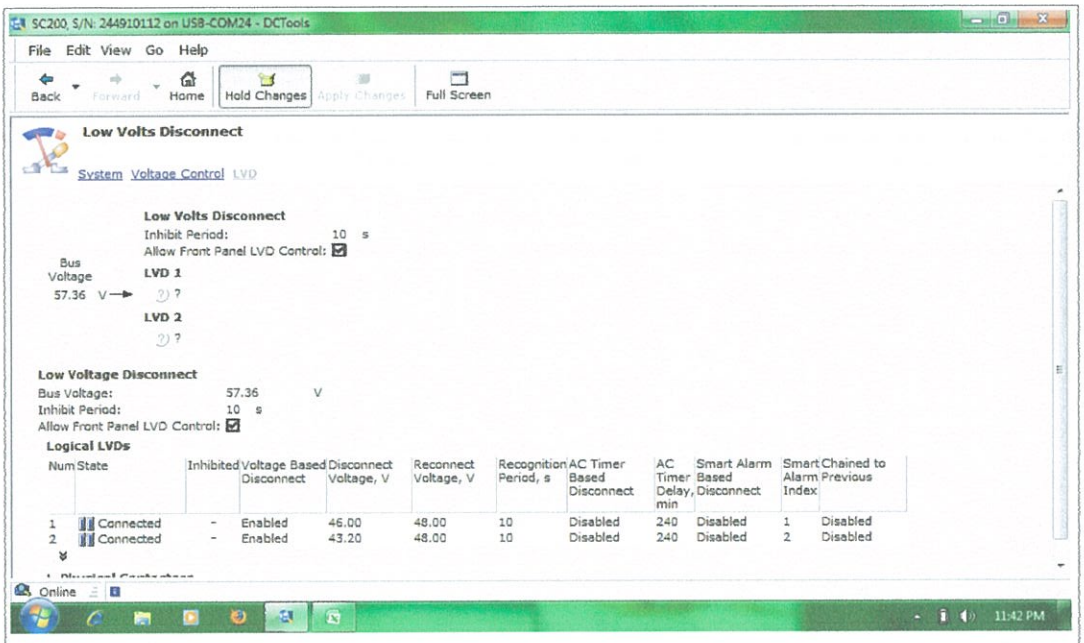
Owner

Hariff

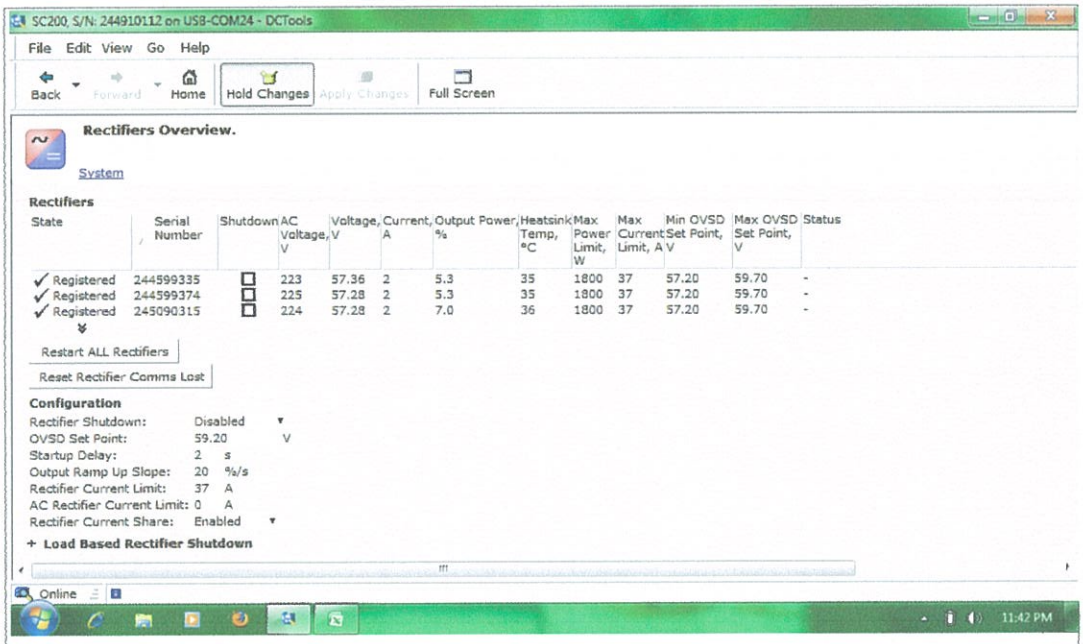
Title

Picture Capture Of Rectifier

Drawing Number	Edition	Sheet
		3/4



LVD



RECT

Designed by	Checked by	Approved by	Site Name	Side ID	Area	Date
			MAM BONJOL	BLS 094	PEKANBARU	09/04/2013

Owner

Hariff

Title

Picture Capture Of Rectifier

Drawing Number	Edition	Sheet
		4/4